U.S. Appln. No. 10/808,947 Reply to Office Action dated May 3, 2006 PATENT 450100-04973

## IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

## Listing of Claims

1. (Currently Amended) A diagnosing device for a stereo camera mounted on a robot, said device comprising:

a flat surface portion on which texture for stereo camera diagnosis is provided;

an attitude unit that causes said robot apparatus placed on said diagnostic mat to
assume a stance suitable for obtaining an image of the diagnostic mat;

a creation unit adapted to create a distance image based on the image obtained by said stereo camera;

an image detection unit adapted to detect the flat face of said diagnostic mat from said created distance image; and

a measurement unit adapted to measure the flatness of said detected flat face, and verifying the performance of a stereo camera according to whether or not the flatness is great greater than a standard flatness.

## 2. (Canceled)

3. (Original) A stereo camera diagnosing device according to claim 1, wherein said robot includes one or more mobile legs including a foot; and

wherein said indicator indicates a place on said surface portion where the soles of

U.S. Appln. No. 10/808,947 Reply to Office Action dated May 3, 2006 PATENT 450100-04973

feet of said robot are placed.

- 4. (Original) A stereo camera diagnosing device according to claim 1, wherein said stereo camera diagnosing device has a folding structure, which becomes a flat shape exposing said surface portion at the time of unfolding said folding structure.
- 5. (Original) A stereo camera diagnosing device according to claim 1, wherein said surface portion includes texture within a template, which can correctly perform matching on an epipolar line in the event of a stereo camera system using template matching.
- 6. (Original) A stereo camera diagnosing device according to claim 1, wherein said surface portion includes texture which allows avoiding mismatching in diagnosis and calibration.
- 7. (Original) A stereo camera diagnosing device according to claim 1, wherein said surface portion has patterns shaded in uniform texture.
- 8. (Original) A stereo camera diagnosing device according to claim 1, wherein said surface portion includes calibration patterns of which geometrical shape is known.
  - 9 15. (Canceled)